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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,345

04/11/2006

Andrew Sharp

P19547-US1

7903

27045

7590

06/08/2009

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EXAMINER

LE, DANH C

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

06/08/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,345	Applicant(s) SHARP ET AL.	
	Examiner DANH C. LE	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 45-52 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 27-44 in the reply filed on 3/31/09 is acknowledged. The traversal is on the ground(s) that claims 27 and 45 are directed to the same subject matter. This is not found persuasive because there was no limitation "the radio access network support node reuses a set of service network transport protocols for communication over the radio access network, the reused protocols being tunneled using the Internet Protocol (IP) through an access station connected to the radio access network control node, said set of service network transport protocols being the 3GPP RRC and RLC/MAC protocols modified to provide access to the service providing network comprising a 3G core network via an lu-interface" in claim 45. Therefore, the independent claims 27 and 45 are distinct.

The requirement is still deemed proper and is therefore made FINAL.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 4/11/06 and 6/9/06 have been considered by the examiner and made of record in the application file.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Regarding claims 43, 44, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

4.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 27-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiprapu (2003/0185190) in view of Chow (US 2003/0058827).

As to claim 27, Chiprapu teaches a system for providing a user station with access to service providing networks over a wireless radio access network (figures 4, 5, element RLAN), comprising:

a radio access network control node (figure 4, RNC) acting as a gateway node between access stations (mobile phone) and the service providing networks (core network);

connection processing means for adapting service providing network transport protocols, converting/mapping service network access bearers into transport protocol packets of the wireless radio access network, such that a user station can access the service providing network services over the radio interface of the wireless radio access network (paragraph 81);

wherein the radio access network support node a set of service network transport protocols for communication over the radio access network, the protocols being tunneled using the Internet Protocol (IP) through an access station connected to the

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radio access network control node (figure 7, element tunnel and internet), said set of service network transport protocols being the 3GPP RRC and RLC/MAC protocols modified to provide access to the service providing network comprising a 3G core network via an lu-interface (paragraphs 16, 18, 19).

Chiprapu fails to teach reused the protocol. Chow teaches reused the protocol (paragraph 38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Chow into the system of Chiprapu in order to utilize a network of smaller cell.

As to claim 28, Chiprapu and Chow teaches the system according to claim 27, wherein the reused protocol stacks are reused transparently over the radio access network air interface (paragraph 37, 38)

As to claim 29, Chiprapu and Chow teaches the system according to claim 27, wherein it supports multiple access bearer connections of different bit rates, types, bandwidth and/or QoS (paragraphs 37, 38).

As to claim 30, Chiprapu and Chow teaches the system according to claim 29, wherein it is capable of establishing one or more access bearers simultaneously wherein the access bearers are configured for different types of media services (Chiprapu, paragraph 3 and figure 4)

As to claim 31, Chiprapu and Chow teaches the system according to claim 30, wherein the access bearers carry connections for a plurality of services of its associated types (Chiprapu, paragraph 3 and figure 4).

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As to claim 32, Chiprapu and Chow teaches the system according to claim 27, wherein the various services provided over access bearers comprise circuit switched as well as packet switched bearers (figure 4, elements PSTN, GGSN).

As to claim 33, Chiprapu and Chow teaches the system according to claim 27, wherein the service providing network is a 3G network, a BRAS IP services provider network, a video on demand network or a live TV network (Chow, paragraph 7, 42)

As to claim 34, Chiprapu and Chow teaches the system according to claim 33, wherein the service providing network is a UMTS/WCDMA or CDMA 2000 (paragraph 25).

As to claim 35, Chiprapu and Chow teaches the system according to claim 27, wherein the IP reused protocols are W-CDMA L3 RRC, L2 RLC/MAC (Chiprapu, paragraph 19).

As to claim 36, Chiprapu and Chow teaches the system according to claim 27, wherein the adapted reused protocols multiple access bearers are set up simultaneously (Chow, paragraph 122)

As to claim 37, Chiprapu and Chow teaches the system according to claim 27, wherein it dynamically establishes a number of access bearers to a user station (figure 4)

As to claim 38, Chiprapu and Chow teaches the system according to claim 27, wherein the access station comprising a Home Base Station (Chiprapu, node B).

As to claim 39, Chiprapu and Chow teaches the system according to claim 27, wherein it provides a user station with the possibility to access

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UMTS/CDMA/BRAS/Video on demand/Live TV service over an IEEE 802.11 network using OFDM based radio technology (Chow, paragraph 10)

As to claim 40, Chiprapu and Chow teaches the system according to claim 28, wherein it controls set-up and release of access bearers by reuse of the RLC/MAC and RRC protocols run over UDP/IP over radio interfaces between the access station and the user station, and over any transport protocol between the RANCN and the access station (Chiprapu, paragraph 21).

As to claim 41, Chiprapu and Chow teaches the system according to claim 27, further comprising a gateway node between access stations of the wireless radio access network, an access station relaying RRC, RLC/MAC over any transport protocol used between the access station and the RANCN (Chiprapu, figure 17).

As to claim 42, Chiprapu and Chow teaches the system according to claim 28, wherein UDP/IP and the Bluetooth or WLAN radio interface is used for RRC/RLC/MAC between service network and RANCN (3), and RANCN (3) and user station (1A, 1B) respectively (figure 17).

As to claim 43, Chiprapu and Chow teaches the system according to claim 27, wherein storing means are provided in a radio access network control node for collecting, holding and sorting identity related information of user stations, and in that for user stations currently being in an area or a location fulfilling some given criteria, or e.g. being in a similar environment as far as service offering or tariff setting is concerned, information thereon is distributed to such mobile user stations having

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indicated that they want information about each other and that they allow information to be distributed to one another (paragraph 38).

As to claim 44, Chiprapu and Chow teaches the according to claim 43, wherein several RANCN:s exchange identity related information about user stations currently in areas or locations in which certain criteria are met, e.g. in areas or locations with similar properties, e.g. as far as charging is concerned (paragraph 7).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Turanyi et al (US 2003/0228868) teaches mobile management for mobile hosts.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANH C. LE whose telephone number is 571-272-7868. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DWAYNE D. BOST can be reached on 571-272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 7, 2009

/DANH C LE/
Primary Examiner, Art Unit 2617